

# AMERICAN COATINGS

## AZ 76 INORGANIC ZINC

Inorganic zinc primer for heavy duty protective paint systems. Lower zinc load than AZ 86.

### GENERAL FEATURES

- SELF CURING SOLVENT BASED INORGANIC ZINC THAT CURES RAPIDLY UNDER LOW TEMPERATURE, HIGH HUMIDITY CONDITIONS.
- SERVICE TEMPERATURES UP TO 750°F
- SUPERIOR ABRASION RESISTANCE
- EXCELLENT RESISTANCE TO SALT SPRAY
- EXCELLENT TANK LINING MATERIAL FOR FUELS AND ORGANIC SOLVENTS

### DESCRIPTION

An inorganic, permanent type primer that protects steel galvanically. AZ 76 has good application properties and prevents undercutting type corrosion. AZ 76 is especially suitable for cool humid environments (as low as 10°F and 95% humidity). At humidities less than 50% and temperatures below 70°F allow additional curing time before topcoating.

### USES

#### General Industrial and Marine:

AZ 76 is a single coat 2.5 – 6 mil coating used to protect steel surfaces subject to severe weathering and abrasion. More thickness may be required to coat old roughly pitted steel surfaces. AZ 76 is an excellent tank lining material for fuels and organic solvents. If topcoating is required for appearance, or a permanent primer system is desired, AZ 76 can be overcoated with phenolics, epoxies, polyurethanes, chlorinated rubber, or other heavy duty topcoats. Some topcoats may require a tie coat. If exposed to alkaline, acidic fumes, or spillage, AZ 76 must be topcoated. When topcoating with recommended organic coatings, a thin mist coat, followed by a full application coat applied in a cross hatch method, may be required.

**NOT RECOMMENDED FOR** – Contact with acids, alkalis, or salts having a PH range greater than 10 or less than 5 without a suitable topcoat. Not recommended for H<sub>2</sub>S environments

### PHYSICAL DATA

Finish ----- Flat  
 Color ----- Green  
 Applied Over ----- Steel  
 Components ----- Two  
 Cure ----- Solvent Release and Reaction  
 With Atmospheric Moisture

Volume Solids ± 2% ----- 68%<sup>1</sup>

### Recommended Dry Film

Thickness ----- 2.5 – 6.0 mils  
 Number of Coats ----- One

Application Method----- Conventional or Airless Spray

Thinning Required----- 10 – 15% TH 600 or TH 620

Dry Time @ 77°F and 50% RH:

Touch ----- 15 – 30 minutes

Through ----- 8 – 12 hours

Topcoat ----- 12 – 16 hours

Theoretical Coverage at:

Recommended Thickness----- 436 – 182 sq. ft/gal<sup>2</sup>

### Temperature Limit

Immersed ----- Consult your American  
 Coatings Representative

Atmospheric ----- 750°F

### Miscellaneous Properties % Zinc in the Dried Film

By Weight ----- 76

Shelf Life ----- 6 months

Pot Life – Mixed @ 77 °F----- 12 hours (less  
 at higher temperatures)

Mix Ratio – by Weight ----- 10 parts A to 17 parts B

### PERFORMANCE DATA

TEST	RESULTS
PENCIL HARDNESS ASTM D-3363	HB TO H
ADHESION ASTM D-3359	No separation of the paint film or delamination of any square.
ADHESION ASTM D-4541	600 psi
SALT FOG RESISTANCE ASTM B-117	Passes 1000 hours with no blistering or rusting. No undercutting from the scribe.
WEIGHT PER GALLON ASTM D-1200	16.6 ± 0.2 #/gal
WEIGHT SOLIDS % ASTM D-2369	70.6%
OIL IMMERSION ASTM D-1308	Passes 1000 hours
SALT WATER IMMERSION ASTM D-1308	Passes 1000 hours
SLIP COEFFICIENT ASTM A-328	Meets requirements for Class B rating.

**AZ 76**

**SURFACE PREPARATION**

**Immersion and/or Severe Service:**

White Metal Sandblast (SSPC-SP5-63) (Sa3)

**Non-immersion or Moderate Service:**

Near White Metal Sandblast (SSPC-SP10-63) (Sa2 1/2)

**Non-immersion or Light Industrial Service:**

Commercial Metal Sandblast (SSPC-SP6-63) (Sa2)

Maximum product performance will be achieved by abrasive blasting with 16 – 40 mesh silica sand, G-50 steel grit, or an equivalent material to obtain a 1 1/2 mil jagged anchor profile. Remove all oil or grease from surfaces to be coated with clean rags soaked with American TH 550 or Toluol or power wash using American Coatings TH 100 Biodegradable Cleaner.

<sup>1</sup> Based on ASRM Method 2697

<sup>2</sup> Coverage's are theoretical and do not make provision for spray losses

**APPLICATION INFORMATION**

**APPLICATION METHOD**

Apply AZ 76 by conventional or airless spray. AZ 76 should be applied in a single pass wet film with 50% overlap. Parallel right angle passes should be made holding the gun approximately 10 – 12 inches from the metal surface.

**MIXING**

Mix the vehicle portion then combine and mix as follows. Add AZ 76B Dust to AZ 76A liquid while mixing with mechanical agitation. **DO NOT MIX IN REVERSE.** Mix until free of lumps, then pour mixture through a 30-mesh screen.

**CLEAN-UP AND THINNING**

Clean all equipment with American TH 600 thinner immediately after use. Thin up to 15% by volume with American TH 600 or TH 620 thinner if required.

**SPRAY EQUIPMENT  
FOR AIRLESS SPRAY**

Use a 3/8" I. D. Material Hose

Suppliers ----- Graco, Speed Flo, De Vilbiss

Fluid Pump ----- 30:1

Fluid Orifice, Inches ----- .025 – .031

Approx. Fluid Pressure, psi ----- 1,500 – 2,000

**FOR CONVENTIONAL SPRAY**

<b><u>Supplier</u></b>	<b><u>Fluid Tip</u></b>	<b><u>Fluid Needle</u></b>	<b><u>Air Cap</u></b>
De Vilbiss	AV-601-E	MBC-444-E	AV-1239-2

Binks # 18	66	65	66PA
Or # 19			

Air to Gun ----- 60 – 70 psi

Air to Pot ----- 10 – 12 psi

Pot should be equipped with a mechanical agitator.

**SAFETY INFORMATION**

**WARNING! FLAMMABLE**

AZ 76 is a flammable liquid and may cause eye and skin irritation. Keep away from heat, sparks, and open flame. Keep container closed. Use only in well ventilated areas. Avoid continued breathing of vapors. Do not take internally. In case of contact, flush with copious amounts of water for at least 15 minutes and get medical attention.

**SHIPPING DATA**

<b>Proper Shipping Name</b>	<b>Part A</b>	<b>Part B</b>
	Paint Liquid	Zinc, Dust

<b>Hazard Class</b>	Flammable	N/A
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<b>Flash Pt. °F SETA</b>	61°F	N/A
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<b>Shipping Wt.</b>	<b>1 gallon</b>	<b>1 gallon</b>
	8.75 pounds	11.25 pounds
	<b>5 gallon</b>	<b>3 gallon</b>
	45.7 pounds	58 pounds

<b>UN No.</b>	1263	1436
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**PACKAGING**

**1 Gallon Units**

Part A Vehicle ----- 1 gallon can partially full

Part B Dust ----- 1 gallon can of powder preweighed

**5 Gallon Units**

Part A Vehicle ----- 1 gallon can partially full

Part B Dust ----- 3 gallon can of powder preweighed

DISCLAIMER

The facts stated and the recommendations and suggestions herein are based upon experiments and supplier information believed to be reliable. No guarantee is made of their accuracy, however, and American Coatings ASSUMES NO LIABILITY FOR PRODUCT FAILURE OTHER THAN TO SUPPLY REPLACEMENT MATERIAL FOR PRODUCTS SHOWN TO BE DEFECTIVE WHEN DELIVERED OR TO REFUND THE PURCHASE PRICE. Except as stated, THERE ARE NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE. AMERICAN COATINGS SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL AND CONSEQUENTIAL DAMAGES. No statement contained herein shall be construed as an inducement to infringe existing patents or as an endorsement of specific manufacturers.